



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Air Protection Branch

4244 International Parkway, Suite 120

Atlanta, Georgia 30354

404-363-7000

MEMORANDUM:

TO: Bonnie Pope
 THROUGH: Daniel McCain
 FROM: Anna Gray
 SUBJECT: SOURCE TEST REPORT REVIEW

The following test has been reviewed and was conducted in an acceptable fashion for the purpose intended.

COMPANY NAME		BD (Becton, Dickinson and Company)			
COMPANY LOCATION		Covington, GA			
SOURCE TESTED		Sterilizer Chamber			
POLLUTANT DETERMINED		Ethylene Oxide			
REPORT REVIEWED BY		Anna Gray			
TEST WITNESSED BY		Anna Gray			
DATE(S) OF TEST		September 11, 2019 to September 12, 2019			
DATE RECEIVED BY APB		October 7, 2019			
MAXIMUM EXPECTED OPERATING CAPACITY		24 UNITS			
OPERATING CAPACITY		24 UNITS			
ALLOWABLE EMISSION RATE		99 % DRE			
APPLICABLE REGULATION		Permit 3841-217-0021-S-04-0, condition 2.3			
CONTROL EQUIPMENT AND MONITORING DATA		RTO-1 Chamber temperature: 1485.7 deg F			
TEST RUN #		1	2	3	AVERAGE
GAS TEMPERATURE (°F)	INLET	131	130	130	
	OUTLET	338.7	326.2	321.7	
GAS MOISTURE (%)	INLET				
	OUTLET	3	3	3	
GAS FLOW RATE (ACFM)	INLET				
	OUTLET				
GAS FLOW RATE (DSCFM)	INLET				
	OUTLET	11615	11752	11808	
POLLUTANT CONCENTRATION (PPM)	INLET				
	OUTLET	0.20	0.20	0.20	0.20
EMISSION RATE (LB/Batch)	INLET	75.1	75.8	74.2	75.0
	OUTLET	0.00557	0.00583	0.00557	0.00565
DESTRUCTION EFFICIENCY (%)		99.9925			



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OTHER INFORMATION

The emission rate is in pounds per batch (cycle) of sterilization, which lasts around 21-22 minutes. Every test run lasted a complete sterilization cycle.
The operating capacity is 24 pallets.

The emission rate for the outlet and the destruction efficiency were calculated by ISMU. Per CARB Method 431, no analytical results are to be reported below the limit of quantification (LOQ). The calculated LOQ for the outlet was less than the stated lower limit of the range of CARB Method 431 (0.20 ppm to 0.50% by volume), therefore 0.20 ppm was used for the outlet pollutant concentration.



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MEMORANDUM:

TO: Bonnie Pope
THROUGH: Daniel McCain *DM*
FROM: Anna Gray
SUBJECT: SOURCE TEST REPORT REVIEW

The following test has been reviewed and was conducted in an acceptable fashion for the purpose intended.

COMPANY NAME	BD (Becton, Dickinson and Company)				
COMPANY LOCATION	Covington, GA				
SOURCE TESTED	Aeration Rooms				
POLLUTANT DETERMINED	Ethylene Oxide				
REPORT REVIEWED BY	Anna Gray				
TEST WITNESSED BY	Anna Gray				
DATE(S) OF TEST	September 11, 2019 to September 12, 2019				
DATE RECEIVED BY APB	October 7, 2019				
MAXIMUM EXPECTED OPERATING CAPACITY	208 UNITS				
OPERATING CAPACITY	208 UNITS				
ALLOWABLE EMISSION RATE	99 % DRE ; 1 PPM				
APPLICABLE REGULATION	Permit 3841-217-0021-S-04-0, condition 2.4				
CONTROL EQUIPMENT AND MONITORING DATA	RTO-1 Chamber temperature: 1485.7 deg F				
TEST RUN #		1	2	3	AVERAGE
GAS TEMPERATURE (°F)	INLET				
	OUTLET				
GAS MOISTURE (%)	INLET				
	OUTLET				
GAS FLOW RATE (ACFM)	INLET				
	OUTLET				
GAS FLOW RATE (DSCFM)	INLET				
	OUTLET				
POLLUTANT CONCENTRATION (PPM)	INLET	66.3	69.6	66.6	67.5
	OUTLET	0.20	0.20	0.20	0.20
EMISSION RATE (N/A)	INLET				
	OUTLET				
DESTRUCTION EFFICIENCY (%)	99.7				



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OTHER INFORMATION

The operating capacity is 208 pallets.

The destruction efficiency was calculated by ISMU. Per CARB Method 431, no analysis results are to be reported below the limit of quantification (LOQ). The calculated LOQ for the outlet was less than the stated lower limit of the range of CARB Method 431 (0.20 ppm to 0.50% by volume), therefore 0.20 ppm was used for the outlet pollutant concentration.